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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/505,411

08/24/2004

Renato Rimondi

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EXAMINER

HUYNH, LOUIS K

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

07/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Syp

<b>Office Action Summary</b>	<b>Application No.</b> 10/505,411	<b>Applicant(s)</b> RIMONDI, RENATO	
	<b>Examiner</b> Louis K. Huynh	<b>Art Unit</b> 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to for lacking proper headings in accordance with current U.S. practice. Applicant is respectfully requested to amend the specification with proper headings in accordance with current U.S. practice.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed specification and drawing do not disclose and/or teach "the generator being mounted on means of approach and withdrawal" as now claimed in the amended claim 1 (lines 19-20).

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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- Claim 1, lines 19-20: “the generator being mounted on means of approach and withdrawal” lacks proper antecedent basis in the specification, the phrase also renders the claim indefinite because the generator is set forth as a fixed generator of hot compressed air and at the same time is mounted for movement.
- Claim 12, line 13: “sends a single to a general computer” is not understood.
- Claim 17, line 4: “the up and down movement of the sealing head” lacks proper antecedent basis.

***Response to Arguments***

6. Applicant's arguments filed 6/1/2007 have been fully considered but they are not persuasive.

- Applicant contends that the device of Muscariello is directed to completely different device for sealing material, thus not subjected to the same problem; in particular, the device of Muscariello does not seal a continuous layer of superimposed, overlapping edges of tubular film. This is not found persuasive because; 1) the intended use in the preamble of the claim is not structural limitations defining the claimed invention and thus carries little patentable weight, and 2) the device of Muscariello is for sealing upper edges (18) of a bag (12), wherein the bag is tubular and the upper edges of the bag are overlapping and comprising most of the claimed structural limitations.
- Applicant contends that the device of Muscariello does not disclose the guide means of the present application. The claimed “guide means” was not interpreted under 35 U.S.C. 112, 6<sup>th</sup> paragraph because the claimed guide means serves more

function than just a guide; in particular, it guides and holds the overlap edges with an intimate and sufficient distributed contact, thus structural limitations in the specification was not imported.

- Applicant further contends that it would not have been obvious to one of ordinary skill in the art to modify the device of Muscariello to include the claimed sealing head made of a material with good mechanical strength, having low coefficient of friction in relation to the film to be sealed and a high degree of thermal insulation. This is also not found persuasive because material used in forming machine component is clearly an engineering designed choice. Furthermore, the claim does not specify what the good mechanical strength having low coefficient of friction and high degree of thermal insulation is. Moreover, applicant has admitted that hot air sealing heads of the prior art are usually made of metal (specification at page 2, lines 1-9). Metal is known to have high mechanical strength and each specific metal can have lower coefficient of friction and higher degree of thermal insulation relative to other metals. Choosing a suitable metal (material) for the sealing head is thus obvious to an ordinary skill person in the art as a matter of engineering designed choice.
- Applicant also contends that it would not have been obvious to one of ordinary skill in the art to modify the device of Muscariello to means for approach and withdrawal of the sealing head since there is no evidence to support such modification. This is also not found persuasive because this feature is old and well known in the art. The reference to Greenawalt et al. (US 3,925,963) has

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been provided as an evidence to establish the *prima facie* case of obviousness.

See the rejection below.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muscariello (US 4,260,447) in view of Greenawalt et al. (US 3,925,963).

- With respect to claim 1, Muscariello discloses an apparatus for sealing bag comprising guide means (belts 32, 34, 46 & 48), a sealing head (nozzle 54) connected to a compressed hot air via an air supply line (104); which meets all of applicant's claimed subject matter but lacks the specific teaching of the sealing head being made in a good material strength with a low coefficient of friction and with a high degree of thermal insulation. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have made the sealing head in a good material strength with a low coefficient of friction and with a high degree of thermal insulation as a matter of engineering designed choice so that the sealing head can withstand the heat of the compressed hot air. The apparatus of Muscariello also lacks the specific teaching of the sealing head being withdrawn when the material to be sealed is stopped. However, the sealing head should be withdrawn when the material is

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stopped in order to prevent burning through the material to be sealed. Greenawalt discloses a form-fill-seal machine comprising a hot air sealer (28) mounted on a slide (194) for sealing overlapped edges of a web material (14), and teaches that the hot air sealer (28) is held at appropriate welding position during operation and automatically retracted to a safe distance when the machine is stopped to avoid burning the web (14); therefore, it would have been obvious to an ordinary skilled person in the art, at the time of the invention, to have provided the sealing head of Muscariello the ability to withdrawn when the material to be sealed is stopped, as taught by Greenawalt, in order to prevent burning through the material.

- With respect to claim 2, the guide means further includes a first guide pulley (58) with a flange (64) for guiding the bag to be sealed which is considered to be equivalent to the claimed opposing block.
- With respect to claims 3 and 4, the guide means also include a second guide pulley (66) which is considered to be equivalent to the claimed guide means that act on opposite face of the material to be sealed to ensure constant contact between the film and the flange (64) of the first guide pulley (58).
- With respect to claim 5, it would have been obvious to a skilled person in the art, at the time of the invention, to have made the sealing head in a suitable engineering polymer since polymer is easy to work with.

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*Allowable Subject Matter*

9. Claims 6-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

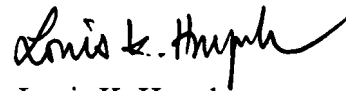
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The examiner can normally be reached on M-F from 8:00AM to 3:00PM.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Louis K. Huynh  
Primary Examiner  
Art Unit 3721

July 11, 2007